PLEASE RETURN BY:		OMB No. 3145-0027: Approval Expires 01/31/99
NOTICE – Your report to the Census Bureau is confidential by law (Title 13, U.S. Code). It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.	CENSUS USE ONLY	FORM RD-1(L) U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS COLLECTING AND COMPILING AGENT FOR THE NATIONAL SCIENCE FOUNDATION SURVEY OF INDUSTRIAL RESEARCH AND DEVELOPMENT DURING 1997 In correspondence pertaining to this report refer to this CENSUS FILE NUMBER (11 digits)
RETURN Bureau of the Census 1201 East 10th Street Jeffersonville, IN 47132-0001	4001	
Name of person who supplied 1996 data	WEIGHT	
	STATE	
Data supplied in items 1A and 1B and in item 3A, line 3, columns 4 and 6, for 1997 on this form will satisfy the mandatory reporting requirements. (Title 13, U.S. Code.)	ADDRESS	
PLEASE READ ENCLOSED INSTRUCTIONS BEFORE COMPLETING THIS FORM.	SIC CODE	
TUIS PEROPT SHOULD COVER VO	LIP ENTIPE CONS	(Please correct any error in name and address, including ZIP Code.) SOLIDATED DOMESTIC ENTERPRISE, INCLUDING ALL U.S. SUBSIDIARIES AND DIVISIONS.
THIS REPORT SHOOLD COVER TO		pany" on this form refers to the consolidated domestic enterprise.
 Please complete this form by the date pringeredurn it in the envelope provided. Make a 	nted at the top of th	his page and • Report figures in thousands of dollars. Reasonable estimates are acceptable.
Please read the enclosed instructions before	ore completing this	• Explain significant changes in year-to-year data in the remarks section.
COVERAGE REVIEW Was this company owned or controlled by a December 31, 1997?	another company o	on 1303 ☐ Yes – See instructions for Coverage Review. 1304 ☐ No – Continue with item 1

A. Net sales, opera	iting receipts and revenues of domesti	ic operat	tions of t	his comp	any (Rep	ort in the	ousands (of dollar	s)						1996		T	1997	
INCLUDE						idental a 11	C C			and force	ian sountr	ion		Bil.	Mil.	Thou.	Bil.	Mil.	Thou
•	ts for sales of products and services partic intra-company transfers and sales			•	es, maiv	iduais, O	.s. Gover	rmnent a	igencies,	and lore	ign counti	ies.		101		THOU	102		1
															Number	L		Numbe	
B. Domestic compa	any employment in all activities during	g the par	y period	which inc	cludes th	e 12th of	f March 1	997 (Iten	n 1 of I.R.	S. Form	941, if one	Form		111	Number		112	Numbe	
	or the entire company.)																		
	ER OF RESEARCH AND DEVELOPN													Ja	Number		Ja	nuary 1 Number	
A. Federal research	time equivalent basis. See page 4 of to	ne instru	iction bo	okiet for .	more aei	tan.								503	Number	<u> </u>	504	Mallipe	<u>'</u>
	ther research and development													505			506		
C. TOTAL - Sum o														501			502		
	INCURRED FOR RESEARCH AND	DEVELO	PMENT	-							-								······
(Report in thousa						1996									1997				
		Fe	ederal fu	nds	Com	pany and	dother	Т	otal ((1)+	(2))	Fed	deral fund	ds	Com	pany and	other	T	otal ((4)+	(5))
			(1)			(2)			(3)			(4)			(5)			(6)	
A. Performed withi	n the company	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou
1. Basic researc	300	301			302			303			304			305]	306		T
	ease mark (X) here			1	L	L					L								
2. Applied	a. Applied research	311	ļ	L	312			313		4	314			315			316		<u> </u>
research and	b. Development	321	ļ	<u> </u>	322	ļ		323	<u> </u>	ļ	324			325			326		ļ
development		331		ļ	332	<u></u>	1	333	 		334			335			336 346	<u> </u>	
3. Total - Sum	of lines 1 and 2.c.	341			342	<u> </u>		343	ļ	-	354			345 355	<u> </u>		356	├	-
company funds performed by a	pany – Federal funds and s for research and development others outside the company ted States (Exclude from 3A.3.	351			352			353			354			355			336		
development pe or other organiz	pany funds for research and erformed by foreign subsidiaries ations outside the United States A.3. and 3B. above)	:			362									365					
except Federal sponsored resea	the any and other funds, I (This line represents company arch and development with the her funds.") – Sum of 3A.3 and C)				372									375					
Item 4 - COMPA	ANY AND OTHER FUNDS, EXCEPT	FEDER	AL, FOR	RESEA	RCH AN	D DEVE	LOPMEN	VT PERI	ORMED	WITHIN	THE COM	VIPANY			1998				
BUDGE	ETED FOR THE YEAR 1998													Bil.	Mil.	Thou.			
(Comparable to the	he 1997 figure reported in Item 3.A.3.,	column	(5))											401					
(comparable to the	Section II - F			ND D	EVELO	NOBAER	UT DEC	EODN	ED W	THIN	THE DO	MECT	C CO	МОЛЬ	IV				
Item 5 - COSTS	INCURRED FOR FEDERAL RESEAL											Key		199			1	1997	
THE CO	MPANY BY PRINCIPAL GOVERNA	MENT A	GENCY									code	`	(1)		1996		(2)	,
	ported in Item 3.A., line 3, column (4),	Federal	tunds, ir	ito the fo	llowing	principal	agencies	i:				5	Bil.	Mil	. Tho	→ N	Bil.	Mil.	Thou
1. Department of D												01	-	_		- °	-		-
	utics and Space Administration											02	+			Α	 		
3. Department of E					· · ·							03	-	_	_	S			├
4. Other Federal ag	- Sum of lines 1 through 4			-								▶ 05				- E		-	
Item 6 - COSTS	INCURRED FOR RESEARCH AND	DEVEL	OPMEN	r PERFO	RMED V	VITHIN 1	THE CON	/PANY	BY MAJ	OR		Kev	1	199	5	1		1997	
TYPE	OF EXPENSE											code	•	(1)		1996		(2)	
	ported in Item 3.A., line 3, column (6),											6 01	Bil.	Mil	. Tho	- N -	Bil.	Mil.	Thou
	ies of research and development pers										ersonner.	- 1 01	+			O	ł—	-	
Costs of material research organiz	ls and supplies consumed – Do not inc ations.	clude in	this item	compon	ents, mo	dels, and	d other m	aterials	supplied	by other		02				A S	L		
3. Other costs - Inc	lude service and supporting costs, R&	D depre	ciation, a	nd share	of over	head.						03				K			
4. TOTAL COSTS	- Sum of lines 1 through 3											04				D		<u> </u>	<u> </u>
									-						PI FA	SE COM	ITINLIF	ON NE	XT PAC

Section I - GENERAL COMPANY DATA

Item 1 - RECEIPTS AND EMPLOYMENT FOR THE COMPANY

Page 2

FORM RD-1(L) (Items 7-9)
SURVEY OF INDUSTRIAL RESEARCH
SUBSECTION OF THE OPMENT DURING 1997

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
COLLECTING AND COMPILING AGENT FOR
THE NATIONAL SCIENCE FOUNDATION
TO THE CONTROL SCIENCE FOUNDATION

AND D	DEVELOPMENT DURING 1997	THE NATIONAL SCIE	NCE F	OUNDA					ort						
Se	ection II — RESEARCH AND DEVELOR	PMENT PERFORME	D,WI	THIN 1	THE DOM	ESTIC	CON	IPAN	IY — C	Conti	nued				
												1996		1 997 (2)	
cate the total reported in it	tem 3.A., line 1, column (6), basic research, into the f	following fields of science a	and eng	ineering).			7	Bil.	Mil.	Thou		Bil.	Mil. Th	OП
Chemistry								01		1	1	N		11	
Engineering (including met	allurgy)							02		ı	1	0		1 1	
Geological Sciences								03		1		Т		1 1	
Mathematics							1	04		i	i				
Computer Sciences								05		1	1	Α		1 1	
Physics								06		T		S			
Astronomy								07		i	i	К		i	
Atmospheric Sciences								08		1	1	E		1 1	
Oceanography								09		i	i i	D		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Biological Sciences							1	10		i	İ			<u>ii</u>	
Clinical Medical Sciences	· · · · · · · · · · · · · · · · · · ·							11		1	1			1 1	
Other —Specify								12		!	!				
TOTAL BASIC RESEARC	H COSTS — Sum of lines 1 through 12 ————						→	13		i	<u>.</u>			i i	
m 8 — APPLIED RESE	ARCH AND DEVELOPMENT PERFORMED	WITHIN THE COMPA	NA B	PROE	OUCT GRO	UP									
					19	95						19	97		
esent the END PRODUCT f	or the firm. See page 7 of the instruction booklet for	groups detailed		Fede	eral funds	Tot	al func	ls	1006	Fe	deral f	unds	To	al funds	П
criptions of product groups			Code		(1)		(2)		1330		(1)			(2)	
SIC Group	Product class		8	Bil.	Mil. Thou	Bil.	Mil.	Thou		Bil.	Mi	I. ⁽ Thou	Bil.	Mil. Th	ou
	m 7 — FIELDS OF BAS cate the total reported in It Chemistry Engineering (including met Geological Sciences Mathematics Computer Sciences Physics Astronomy Atmospheric Sciences Decanography Biological Sciences Clinical Medical Sciences Clinical Medical Sciences Clinical Medical Sciences Other — Specify FOTAL BASIC RESEARC TOTAL BASIC RESEARC TOT	m 7 — FIELDS OF BASIC RESEARCH PERFORMED WITHIN THE cate the total reported in Item 3.A., line 1, column (6), basic research, into the Chemistry Engineering (including metallurgy) Geological Sciences Mathematics Computer Sciences Physics Astronomy Atmospheric Sciences Decanography Biological Sciences Clinical Medical Sciences Citer — Specify FOTAL BASIC RESEARCH COSTS — Sum of lines 1 through 12 — ms — APPLIED RESEARCH AND DEVELOPMENT PERFORMED cate the totals reported as applied research and development in Item 3.A., line and (6), into the following product groups and funding sources. These product carptions of product groups.	Section II — RESEARCH AND DEVELOPMENT PERFORME m 7 — FIELDS OF BASIC RESEARCH PERFORMED WITHIN THE COMPANY scate the total reported in Item 3.A., line 1, column (6), basic research, into the following fields of science Chemistry Engineering (including metallurgy) Geological Sciences Wathernatics Computer Sciences Physics Astronomy Atmospheric Sciences Deceanography Biological Sciences Chemistry Circles Medical Sciences Chemistry m 8 — APPLIED RESEARCH COSTS — Sum of lines 1 through 12 m 8 — APPLIED RESEARCH and DEVELOPMENT PERFORMED WITHIN THE COMPA cate the totals reported as applied research and development in Item 3.A., line 2.c., columns and (6), into the following product groups and funding sources. These product groups essent the END PRODUCT for the firm. See page 7 of the instruction booklet for detailed criptions of product groups.	Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPANY water the total reported in Item 3.A., line 1, column (6), basic research, into the following fields of science and engence of the total reported in Item 3.A., line 1, column (6), basic research, into the following fields of science and engence of the total reported in Item 3.A., line 1, column (6), basic research, into the following fields of science and engence of the total reported in Item 3.A., line 2, columns and (6), basic research, into the following fields of science and engence of the total reported as applied research and development in Item 3.A., line 2.c., columns and (6), into the following product groups and funding sources. These product groups Key criptions of product groups.	Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN m 7 — FIELDS OF BASIC RESEARCH PERFORMED WITHIN THE COMPANY cate the total reported in Item 3.A., line 1, column (6), basic research, into the following fields of science and engineering Chemistry Engineering (including metallurgy) Geological Sciences Mathematics Computer Sciences Physics Astronomy Atmospheric Sciences Deceanography Biological Sciences Chemistry Fortal Basic Research Costs — Sum of lines 1 through 12 m 8 — APPLIED RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPANY BY PROI cate the totals reported as applied research and development in Item 3.A., line 2.c., columns and (6), into the following product groups and funding sources. These product groups Federictions of product groups.	Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOM The Total Section II — RESEARCH PERFORMED WITHIN THE COMPANY Coate the total reported in Item 3.A., line 1, column (6), basic research, into the following fields of science and engineering. Chemistry Engineering (including metallurgy) Geological Sciences Wathernatics Computer Sciences Physics Astronomy Atmospheric Sciences Diter — Specify Total Basic Research Costs — Sum of lines 1 through 12 — The Management of the Sciences of the Section of Section	Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC The Tomas of the total reported in Item 3.A., line 1, column (6), basic research, into the following fields of science and engineering. Chemistry Engineering (including metallurgy) Geological Sciences Wathernatics Computer Sciences Physics Astronomy Atmospheric Sciences Diter — Specify FOTAL BASIC RESEARCH COSTS — Sum of lines 1 through 12 The May applied research and development in Item 3.A., line 2.c., columns and (6), into the following fields of science and engineering. Total computer Sciences The Computer Sciences Total Basic Research Costs — Sum of lines 1 through 12 The Sciences Applied research and development in Item 3.A., line 2.c., columns and (6), into the following product groups and funding sources. These product groups Total Computer Sciences Total Computer Sciences Total Computer Sciences Total Computer Sciences The Computer Sciences Total Computer Sciences The Computer Sciences Total Computer Sciences Total Computer Sciences The Computer Sci	AND DEVELOPMENT DURING 1997 Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC CON The 7 — FIELDS OF BASIC RESEARCH PERFORMED WITHIN THE COMPANY Cate the total reported in item 3.A., line 1, column (6), basic research, into the following fields of science and engineering. Chemistry Engineering (including metallurgy) Geological Sciences Wathernatics Computer Sciences Physics Astronomy Atmospheric Sciences Ciceanography Biological Sciences Chemistry Total Basic Research Costs — Sum of lines 1 through 12 — — — — — — — — — — — — — — — — — —	Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC COMPAN m 7 — FIELDS OF BASIC RESEARCH PERFORMED WITHIN THE COMPANY cate the total reported in Item 3.A., line 1, column (6), basic research, into the following fields of science and engineering. Chemistry AND DEVELOPMENT DURING 1997 Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC COMPANY —	Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC COMPANY — Conting to this report mr. 7 — FIELDS OF BASIC RESEARCH PERFORMED WITHIN THE COMPANY (1) Chemistry (1) Chemistry (1) Chemistry (1) Chemistry (1) Caeloigical Sciences (1) Caeloigical Sciences (1) Champeter Scie	Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC COMPANY — Continued To The Performent of the total reported in Item 3.A., line 1, column (6), basic research, into the following fields of science and engineering. Chemistry Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC COMPANY — Continued m 7 — FIELDS OF BASIC RESEARCH PERFORMED WITHIN THE COMPANY cate the total reported in Item 3.A., line 1, column (6), basic research, into the following fields of science and engineering. Chemistry O1	Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC COMPANY — Continued m 7 — FIELDS OF BASIC RESEARCH PERFORMED WITHIN THE COMPANY cate the total reported in Item 3.A., line 1, column (6), basic research, into the following fields of science and engineering. Chemistry O1	Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC COMPANY — Continued To T — FIELDS OF BASIC RESEARCH PERFORMED WITHIN THE COMPANY Cate the total reported in Item 3.A., line 1, column (6), basic research, into the following fields of science and engineering. Chemistry 11 1996 (2) To Bill Mill Thou Rill Mill		

8.	Atmospheric Sciences								08		1 1		E		1 1	
9.	Oceanography								09		i i		D		1 1	
10.	Biological Sciences								10		i i				1	
11.	Clinical Medical Sciences								11		t I				1 1	
12.	Other Specify								12							
13.	TOTAL BASIC RESEARC	H COSTS — Sum of lines 1 through 12 —————————						→	13						1 1	
lt	em 8 — APPLIED RESE	EARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPA	NY BY	/ PROD	OUCT (GROL	JP.						•			П
AI	locate the totals reported as	applied research and development in Item 3.A., line 2.c., columns				199	95						19	97		٦
re) and (6), into the following present the END PRODUCT:	product groups and funding sources. These product groups for the firm. See page 7 of the instruction booklet for detailed	Key	Fede	eral func	is	Tota	ai fund	ls	1	Fede	eral fu	nds	Tot	al funds	٦
de	scriptions of product group	s.	code		(1)			(2)	-	1996		(1)			(2)	١
No.	SIC Group	Product class	8	Bil.	Mil.	Thou	Bil.	Mil.	Thou	1	Bil.	Mil.	Thou	Bil.	Mil. Thou	ī
1	20	Food and kindred products	01		1 1					N	i	1			, , , , , , , , , , , , , , , , , , ,	٦
2	22	Textile mill products	02		i i		i i	i	i	0	l	i	i		i	┪
3	24	Lumber and wood products	03							Т		I	T		T	٦
4	26	Paper and allied products	04		1 1							_	-		1 1	٦
5	281, 286	Industrial inorganic and organic chemicals	05		1 1		i		·	Α		i I	1		1	1
6	282	Plastics materials and synthetic resins, rubber, and fiber	06		1 1					S		Г	F			٦
7	283	Drugs	07		+ +					К		 				\dashv
8	287	Agricultural chemicals	08		ii		'			Е		1	 			1
9	Balance of SIC 28 group	Cleaning supplies, toiletries, and paints	09							D		!				٦
10	29, 13	Petroleum refining, and oil and gas extraction	10									1	: -			┨
11	30	Rubber and miscellaneous plastics products	11		i i		i	i	ļ.			i	<u></u>		- i -	1
12	31	Leather	12		1 1		1			· · · · · ·		Г.				┪
13	32	Stone, clay, glass, and concrete products	13													┪
14	331, 332, 3399	Primary ferrous products	14		1 1		1	<u> </u>				i	i		<u> </u>	1
15	Balance of SIC 33 group	Primary and secondary nonferrous metals	15		!!		!						!			┪
16	348	Ordnance, except missiles	16		<u> </u>							I				7
17	Balance of 34	Fabricated metal products	17		F I		I	Ī				1	ì		I	
18	351	Engines and turbines	18									1				٦
19	352	Farm machinery and equipment	19		ii		i	i				1				
20	353	Construction, mining, and materials handling machinery	20		1		1	1				ı	1	1	1	٦
21	354	Metal working machinery and equipment	21									1				٦
22	357	Office, computing, and accounting machines	22		1 1		1	i				i	i			٦
23	Balance of SIC 35 group	Other machinery, except electrical	23		1 1		!	1				!			. !	٦
24	361	Electric transmission and distribution equipment	24		1 1								1			٦
25	362	Electrical industrial apparatus	25				ı	Ī				i		ı		1
26	365	Radio and television receiving sets, except communication types	26		1 1			Ī				!	1		. !	
27	366	Communications equipment	27		<u> </u>			T				1				
28	367	Electronic components and accessories	28		i i			I				i	i		i	
29	Balance of SIC 36 group	Other electrical machinery equipment and supplies	29		1 1			I				l			. !	_
30	371	Motor vehicles and equipment	30		1		i					1	<u>.</u>		<u> </u>	
31	372	Aircraft and parts	31		1 1			- 1				1	i			\rfloor
32	376	Missiles and space vehicles	32		1 1								!			
33	Balance of SIC 37 group	Other transportation equipment	33				i					L				
34	381-2	Scientific and mechanical measuring instruments	34	- 1	1 1							1	1		1	
35	Balance of SIC 38 group	Optical, surgical, photographic, and other instruments	35					1				1	<u> </u>		T	⅃
36	737	Software	36		نــــــــــــــــــــــــــــــــــــــ		i						<u>. </u>			_
		Other — Specify		1	1 1		ļ	1				1	,	1	1	-
37			37		 		!	!				l 	1		<u> </u>	╛
38	TOTAL APPLIED RESEAR	RCH AND DEVELOPMENT COSTS — Sum of lines 1 through 37	38													⅃
																1

	\neg		19	95						19	97							19	95						199	97		
(ey ode	State	Fede	eral funds (1)	То	tal fund	ds	1996	Fede	ral fun	nds	То	tal fund	s	Key code	State	Fed	eral fu (1)	ınds	To	tal fund (2)	İs	1996	Fede	eral fun (1)	ds	To	tal fund (2)	ds
9	"	Bil.	Mil. Thou	Bil.		Thou		Bil.	Mil.	Thou	Bil.	Mil.	Thou	9		Bil.	Mil.	Thou	Bil.	Mil.	Thou		Bil.	Mil.	Thou	Bil.	Mil.	Tho
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05	CA		i i		1	Ī	Α		1	1		1 1		31	NJ		I	ı		1	I	Α		1	1		1	1
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20	ME				Ì	ī			I	1		1 1		46	VT		I	1		1	I			ŧ	1		1	1
21	MD				1									47	VA		!	1		1							 	-
22	MA		1 1		i	1			L					48	WA		i.	i		i	<u>.</u>			<u>. </u>			<u>.</u>	<u>.</u>
23	МІ		i i		1	i			1	1				49	W۷		l	1		i	I			1			1	1
24	MN				1									50	WI		1			!				1			ļ	
25	MS				1	1						<u> </u>		51	WY		1			<u>. </u>				i			1	<u>i </u>
26	МО		1 1	Γ	ı	l l				1		1 1		52	*		1	1		1	1			1			1	1

FORM RD-1(L)(Items 10-14)

C. Solid waste

E. TOTAL – Sum of lines A through D ->

D. Other

06

07

U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS COLLECTING AND COMPLING AGENT FOR THE NATIONAL SCIENCE FOUNDATION

SURVEY OF INDUSTRIAL RESEARCH AND DEVELOPMENT DURING 1997

Refer to this CENSUS FILE NUMBER in any correspondence pertaining to this report

		Section II - RI	ESEA	RCH A	MD D	EVELO	PMEN	IT PER	RFORM	ED WI	THIN 1	HE DO	OMEST	IC CO	MPAN	IY – Co	ontinu	ed			
Item 10 - EN	ERGY RE	SEARCH AND D	EVEL	OPMEN	IT PERI	FORME	D WITH	IIN THE	COMP	PANY											
Report expen-	ditures for	energy research a	and			19	96					19	97					19	98		
development Include the pr cost incurred energy resour	by type of oject cost of for the pur ces or cap should be	energy sources. or portion of proje pose of increasing abilities. These included in Item 3	ect g	Fe	deral fu	nds	т	otal fun	ıds	Fed	deral fu	nds	To	otal fun	ds		Projecte deral fu			Projecte otal fun	
Estimate experesearch by experience			Key code		(1)			(2)			(1)			(2)			(3)			(4)	
	iorgy oour		10	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.
A. Nuclear	1. Fissio	n	01		1	1		i	1			1			1			1			_
	2. Fusio	n	02		1	1		1	1			1			l		1	1		t	ı
	3. Total		03			! 		ļ 1	!		l ———	l 					l	1		1	
B. Fossil fuels	1. Oil		04		<u>i</u>	<u>.</u>		<u>i </u>	<u>i </u>			<u>.</u>			<u>i </u>			<u>i</u>		1	1
	2. Gas		05		!	I		!	1			1			1		1	1		I	1
	3. Shale		06		! 	ļ		! 	 			! 			+					! 	.
•	4. Coal	a. Synthetic fuels	07		I I	1		1 1	1 1			1 			1 [.			i i		i I	I I
		b. Mining	80		1			Ţ	I												!
		c. All other	09		i	i		i	i			1			1			i		1	1
		d. Total coal	10		l	I		1	1			1			ı			l		1	1
	5. Other	fossil fuels	11					1				I			1					ı	
ľ			1	i	i	i		i	i			i	i		ì			ı		i	ì
	6. Total		12		1	1		1	1			<u> </u>			1			l .		1	
C. Geothermal, solar,	1. Geoth	ermal	13		<u> </u>	· 		+				<u> </u>								<u> </u>	
conserva-	2. Solar		14	ļ		<u> </u>		1	1			1	!		l			1		1	İ.
tion and utilization	3. Conse utiliza	ervation and tion	15		 	 		! !] }			 			! !			!
	4. Total	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	16		I	ı		İ	i						i					1	
D. All other ener	70V		17		l	1		 	1	'		 			l I	I		I I		I I	1
D. All ballet eller	97	 	17		 	<u> </u>		!		-											!
E. TOTAL - Sui	n of lines	1 through D ->	18		•			1	! !				, J		' 1					ł I	¦
		ABATEMENT RE		CH AN	ID DEV	ELOPM	ENT P	ERFOR	MED W	ITHIN T	HE CO	MPAN	7			·		•			
ſ		oollution abateme																			
		to be abated. Incli n of the project co				19	96					19	97					19	98		
incurred for th	e purpose	of designing polls	ution																		
or of designing into processes	g pollution . These ex	roduct characteris abatement featur penditures should	es	Fed	deral fur	nds	Te	otal fun	ds	Fed	leral fur	nds	To	tal fund	ds		rojecte			Projecte	
included in Ite and (6).	m 3.A., line	3, columns (4)	Key													Fed	leral fur	nds	to	otal fund	ds
Estimate expe	nditures fo	r pollution	code		(1)			(2)			(1)			(2)			(3)			(4)	ļ
abatement res	earch for 1	998.	11	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mił.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.
A. Air	1. Automo	tive emissions	01																	i	ŀ
	2. Electric emissio	power plant ns	02					i i	! !	! !			1			! !				 	
	3. All othe	r	03						1	i				`							
	4. Total a	ir	04					l	1				1			ī				1	1
								l					"1			I			_		
B. Water			05		i			i	, I	i	ì		i			i		i . I			.

Item 12 - FOREIGN RESEARCH AND DEVELOPMENT BY COUNTR				Key		1997	
Report the amount of total foreign research and development, Ite If necessary, write in countries not listed. Report the balance of for	n 3.C., column (5), for the countries with the larges	t expenditures.		12	Bil.	Mil.	Thou
1. Canada	rosgii rosodion und dovelopinent un inte s.			01		IVIII.	Thou
2. Germany	h			02	<u>'</u>		
3. France				03			i
4. Japan				04			+
5. United Kingdom				05			1
6. Puerto Rico				06			Τ-
7. Other — Specify				1			
				07	1		1
8. Other — Specify			-	 " 	i		†
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0.0				08			!
9. Balance not distributed				1 09 1			
10 TOTAL O (C. A.)					-		
10. TOTAL - Sum of lines 1 through 9 Item 13 - COVERAGE AND OPERATIONAL STATUS	1201 □ Voc			10	1		1
	iestic 1301 ☐ Yes 1302 ☐ No - <i>Please expla</i>	in in the "Remarks" section	on the back of	1	ege.		
tem 13 – COVERAGE AND OPERATIONAL STATUS A. Are research and development expenditures for the entire don enterprise, including subsidiaries, reported on this form? B. New owner information	estic	in in the "Remarks" section	on the back of	1	ge.		
A. Are research and development expenditures for the entire don enterprise, including subsidiaries, reported on this form? B. New owner information 602 Name	estic	in in the "Remarks" section	on the back of	1	ige.		1
A. Are research and development expenditures for the entire don enterprise, including subsidiaries, reported on this form? B. New owner information 602 Name	estic	in in the "Remarks" section		f the pa	ge.		1
htem 13 – COVERAGE AND OPERATIONAL STATUS A. Are research and development expenditures for the entire don enterprise, including subsidiaries, reported on this form? B. New owner information 602 Name 603 Address (Number and street)	estic 1302 No - Please expla.			f the pa			
htem 13 – COVERAGE AND OPERATIONAL STATUS A. Are research and development expenditures for the entire don enterprise, including subsidiaries, reported on this form? B. New owner information 602 Name	estic 1302 No - Please expla.			f the pa	P Code	Exte	tension
A. Are research and development expenditures for the entire don enterprise, including subsidiaries, reported on this form? B. New owner information 602 Name 603 Address (Number and street) 604 City Item 14 - CERTIFICATION - This report is substantially accurate and h	estic 1302 No - Please expla.	605 St	ate	606 ZIF	P Code		ension
Item 13 – COVERAGE AND OPERATIONAL STATUS A. Are research and development expenditures for the entire don enterprise, including subsidiaries, reported on this form? B. New owner information 602 Name	is been prepared in accordance with instructions	605 St	ate	606 ZIF	P Code er		ension

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